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Reaching Out: An Overview of Communication Intervention Strategies for Individuals with Autism.

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Introduction

- Autism: A Personal Perspective
  - Childhood experiences.
  - Teaching therapeutic swimming.
  - Working in the public schools.
  - Researching for numerous Honors Projects.
Today, I will briefly discuss several communication intervention strategies for individuals with autism. Many of these strategies are controversial and are not supported by the American Speech-Language Hearing Association. My goal for this presentation was to explore a variety of intervention strategies that I knew little about.

What is Autism?

- Autism is a collective term for a syndrome that arises in many ways and manifests itself differently in each person with autism.
- Autism typically emerges in infancy or early childhood.
- Characteristics include significant social, emotional, cognitive, and communicative disturbances.
Autism Spectrum Disorder

Autism Spectrum Disorder refers to a broad definition of autism, including the classical form and other closely related disorders:

- Pervasive Developmental Disorder-Not Otherwise Specified
- Rett’s Syndrome
- Asperger Syndrome
- Childhood Disintegrative Disorder

Communication in Autism

- Language delays and disorders are almost always present in autism.
- More than 50% of people with autism are non-verbal.
- The level of competence in communication has been found to be a predictor for positive outcomes (Lord & Paul, 1997).
Communication Characteristics:
The building blocks

- Individuals with autism lack the ability to acquire the basic sound/symbol units which are the building blocks of speech.
- The result is fragmented language development.
- If speech development does occur, phoneme (speech sound) acquisition follows the typical developmental pattern.

Communication Characteristics:
Joint attention

- Joint attention is the ability to coordinate attention between people and objects.
- A parent and a young child who are looking at a book together are demonstrating joint attention.
- A deficit in joint attention includes a minimal inclination to share enjoyment, interests, or achievements with other people.
- A deficit in joint attention is a core feature of autism in the diagnostic criteria of the DSM-IV.
Communication Characteristics: Echolalia

- The repetition of words or phrases that are spoken to a person.
- Immediate Echolalia
  - Repeating words or phrases immediately
- Delayed Echolalia
  - Repeating words or phrases after time has passed
- Commonly demonstrated by people with autism.

Treatment Decisions

- Even though autism has been studied for over 50 years, controversy, misinformation, and confusion still exist.
- Parents need to be aware that different professionals will have different opinions.
- When parents are considering communication intervention strategies for their children with autism, they should explore all of their options.
- If possible, parents should also work closely with professionals who have expertise in this area.
Treatment Decisions continued

- Many children with autism develop behavioral problems related to their frustration in communication.
- Non-verbal communication systems should always be a consideration for children with autism who are:
  - 2 ½ to 3 years of age.
  - Not developing speech or other communication skills.

Treatment Decisions continued

- The decision to implement a non-verbal communication system must be supported by all caregivers and carried through to other environments.
- Professionals need to help parents understand that introducing a non-verbal system does not mean that speech is being "given up" on.
- Research indicates that non-verbal systems may actually facilitate speech acquisition (Prizant & Wetherby, 1993).
Intervention Strategies

- I. Sign Language
- II. Facilitated Communication
- III. Voice Output Communication
- IV. Auditory Integration Training
- V. The Lovaas Method

I. Sign language

- Results of sign training efforts have been both promising and contradictory.
- Following sign training, some children with autism develop speech while others do not.
- Sign training involves the use of operant conditioning.
- In 1982, E. Carr reported that children who had been taught to sign would often create new sign combinations on their own.
II. Facilitated communication (FC)

- FC is a method for providing assistance to a non-verbal individual by using computer keyboards or alphabet letter boards to produce letters, words, phrases, and sentences.

- FC is not supported by the American Speech-Language Hearing Association.

II. Facilitated communication continued

- FC involves the graduated manual prompting procedure.
  - The facilitator’s intent is to support the person’s hand sufficiently to select a key on a keyboard without influencing the key selection.
  - As time goes on, this support can be either withdrawn entirely or reduced to a hand on the writer’s shoulder.
III. Voice Output Communication

- Voice output communication aids (VOCAs) are portable computer devices that produce synthetic or digitized speech output when activated.
- The speech output of VOCAs offers a more natural, understandable system than graphic or sign alternatives.

III. Voice Output Communication continued

- VOCAs provide a potentially efficient way to gain the attention of communication partners.
- VOCAs eliminate the need for:
  - Visual proximity of communication partners.
  - Specific knowledge of the alternative system by the communication partner (i.e. how to interpret various manual signs).
III. Voice output communication continued

- Despite the beliefs of VOCA supporters, more research is needed in this area.

- Although there seem to be many benefits with the use of VOCAs, a relative lack of research exists which demonstrates successful VOCA use by children with autism (Romski & Sevcik, 1996).

IV. Auditory Integration Training (AIT)

- AIT was first introduced to the United States in 1991 and has become increasingly popular with parents of children who are autistic.

- AIT involves listening to music that has been modified via the computer.
  - Frequencies are removed to which the individual demonstrates hypersensitivities.
IV. Auditory integration training continued

- AIT practitioners report that individuals who receive AIT experience many benefits:
  - Improved attention and auditory processing.
  - Decreased irritability and lethargy.
  - Improved expressive language and receptive comprehension.

AIT is not supported by the American Speech Language Hearing Association.

V. The Lovaas Method

- The Lovaas method is one of the most widely known intervention techniques for autism.
- First developed over 30 years ago by O. Ivar Lovaas, a psychologist at UCLA.
- This treatment is based on the principles of operant conditioning: reinforcement and punishment.
- The Lovaas method is also known as Discrete Trial (DT), Intensive Behavior Intervention (IBI), and Applied Behavior Analysis (ABA).
V. The Lovaas Method continued

The goal of the Lovaas method is to teach children *how to learn* by focusing on developing skills in several areas:

- attending
- imitation
- self-help
- receptive and expressive language
- pre-academics

V. The Lovaas Method continued

- Parent Training
  - Lovaas and his colleagues determined that parents and other caretakers would be incorporated into a therapy team. This therapy team would give continuous treatment to the child with autism.
  - Lovaas believe that providing more treatment in more settings, at the hands of more adults, would produce better, longer-lasting results.
V. The Lovaas Method continued

- Language Training
  - Lovaas' main goal was to teach children with autism a language which resembled normal adult language.
  - Lovaas believed that if a child with autism learned to talk, "somehow a concept of himself would emerge, that he might become more defined as a person, that he might show more self control" (Lovaas, 1977).

Conclusion

- Today I have briefly discussed a number of communication intervention strategies for individuals with autism.
- However, please be aware that I have not been able to cover all existing options (i.e. Picture Exchange Communication System- PECS).
- My advice to parents and professionals alike is to consider the variety of intervention strategies in order to find the best option.
- For professionals, I strongly advise seeking out evidence based intervention strategies.
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Bibliography


